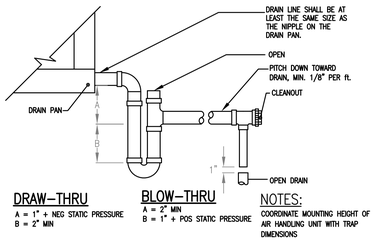
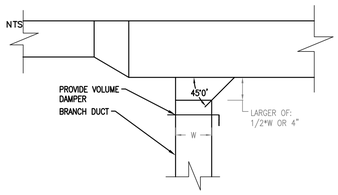
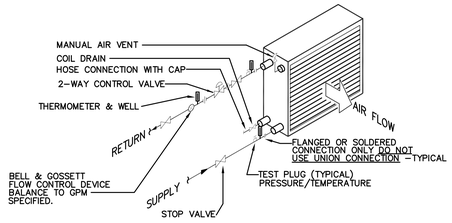


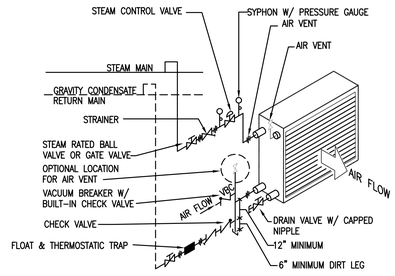
1 MS5.1 AHU COIL CONDENSATE DRAIN PIPING
NTS



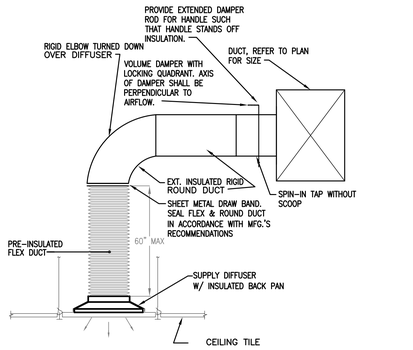
2 MS5.1 TYPICAL RECTANGULAR DUCT TAKE OFF
NTS



3 MS5.1 HOT WATER COIL PIPING DETAIL
NTS



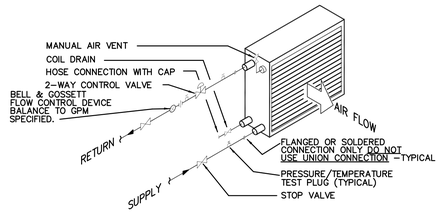
4 MS5.1 STEAM PREHEAT COIL PIPING DETAIL
NTS



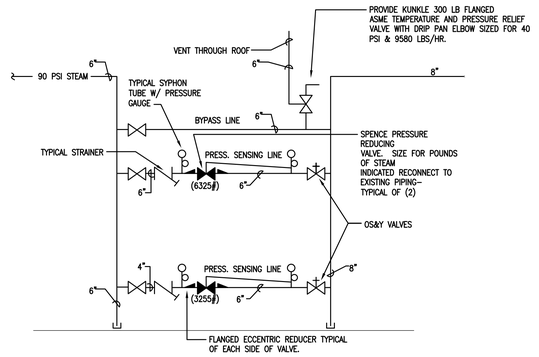
5 MS5.1 DIFFUSER INSTALLATION
NTS

NOTES:

1. INSULATE ALL PIPING, VALVES, FITTINGS AND ACCESSORIES. RE: SPECIFICATIONS
2. INSTALL TEST PLUGS IN EASILY ACCESSIBLE LOCATIONS WITH MINIMUM OF 12" CLEARANCE IN FRONT.



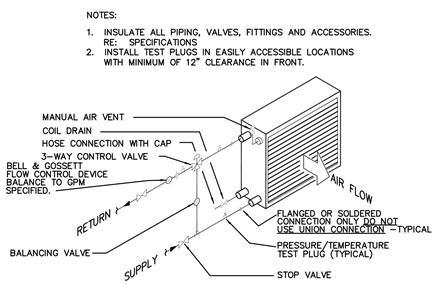
6 MS5.1 COIL CHILLED WATER PIPING (EACH OF TWO COILS)
NTS



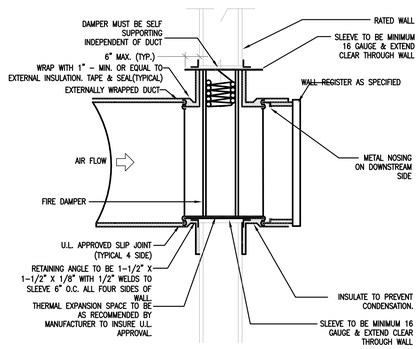
7 MS5.1 STEAM PRESSURE REDUCTING STATION
NTS

NOTES:

1. INSULATE ALL PIPING, VALVES, FITTINGS AND ACCESSORIES. RE: SPECIFICATIONS
2. INSTALL TEST PLUGS IN EASILY ACCESSIBLE LOCATIONS WITH MINIMUM OF 12" CLEARANCE IN FRONT.



8 MS5.1 3–WAY HOT WATER COIL PIPING DETAIL
NTS



9 MS5.1 FIRE DAMPER
NTS

BY CONTROL POINT:

(T) –CONTROLS:
STEAM PRE–HEAT COIL VALVE
SETPOINT: 50°F

(T) –CONTROLS:
CHILLED H2O COILS
HW RE–HEAT COIL
SETPOINT: 50°F

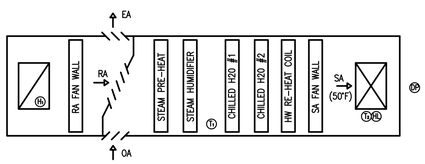
(H) –CONTROLS:
STEAM HUMIDIFIER
SETPOINT: 50%

(H) –CONTROLS:
SHUTS DOWN STEAM PRE–HEAT COIL
OPENS CHILLED H2O TO DEHUMIDIFY
SETPOINT: 85%

(DP) –DUCT STATIC PRESSURE SENSOR:
MODULATES FAN WALL BASED ON THE STATIC PRESSURE IN THE MAIN SUPPLY DUCT.

–MASS CASUALTY CONTROL BUTTON (LOCATED AT NURSES STATION):
EA DAMPER SHALL FULLY OPEN TO RELIEF 10% MORE AIR THAN UNDER NORMAL OPERATING CONDITIONS.
RA FAN SHALL MODULATE TO 10% ABOVE NORMAL OPERATING SPEED.
WHEN MASS CASUALTY MODE IS ENTERED UNIT SHALL STAY AT DESIGNED OPERATING CONDITION FOR A MINIMUM OF 20MIN.
UPON RESUME OF NORMAL OPERATION EA DAMPER SHALL MODULATE BACK TO NORMAL POSITION.

–BLDG PRESSURE SENSOR:
LOCATED AT NURSES STATION TO ENSURE POSITIVE BUILDING PRESSURE UNDER NORMAL OPERATING CONDITIONS.
MODULATES RA FAN WALL.



PLAN VIEW AHU–1

BY DEVICE: (MANUF. IN CHARGE OF CONTROL POINT)

STEAM PRE–HEAT COIL: (TRANE)
–OPEN/ CLOSES BY T1

STEAM HUMIDIFIER: (TRANE)
–OPEN/ CLOSES BY H1
–HL OVERRIDES H1

CHILLED H2O COILS: (TRANE)
–MODULATE BY T2
–COIL #1 OPENS FIRST TO FULL OPEN
–COIL #2 OPENS AFTER COIL #1 IS FULL OPEN
–HL OVERRIDES T2 AND FULLY OPENS COIL #1 AND #2

FAN WALL: (TRANE)
–MODULATE BASED ON DUCT STATIC (DP)

HW RE–HEAT COIL: (TRANE)
–MODULATE ON T2

10 MS5.1 AHU–1 CONTROL SEQUENCE
NTS

MECHANICAL DETAILS

KEY PLAN N

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EMERGENCY DEPARTMENT

AMARILLO VA HEALTH CARE SYSTEM
AMARILLO, TEXAS

Approved: VA Area Proj. Mgr.

V.A. PROJECT NO:VA258-P-0196
SBBL PROJECT NO:0110.00.0
DRAWN BY: Author
CHECKED BY: Checker
DATE: 07/15/11

△	Date	Revision

Approved: Med. Cter. Director

Approved: Asst. Admin Engineering Service

Approved: Asst. VA Medical Director

Approved: Chief of Facilities

Approved: Chief of Engineering

Approved: Chief of Projects

48-MS5.1

three inches = one foot
one and one-half inch = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot